

CLAIMS

1-22. (CANCELLED)

23. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

a mask;

a blower to supply breathable gas at a pressure above atmospheric to said mask;

a flow sensor to generate a flow signal indicative of the patient's airflow; and

a computer to process said flow signal and control said blower wherein said computer is programmed with instructions for:

controlling said blower to deliver breathable gas at a pressure above atmospheric to a patient; and

calculating a stroke indicator from said flow signal, said stroke indicator representing information about the patient's condition,

wherein said instructions for calculating said stroke indicator control an analysis of said flow signal to determine an occurrence of central apnea, and

wherein said instructions for calculating said stroke indicator control an analysis of said airflow to determine an occurrence of obstructive apnea, and

wherein said instructions for calculating said stroke indicator control a calculation of said stroke indicator as a function of a ratio of said occurrence of central apnea and said occurrence of said obstructive apnea.

24. (ORIGINAL) The apparatus of claim 23 wherein said computer is further programmed with instructions for recording said stroke indicator over time.

25. (ORIGINAL) The apparatus of claim 24 wherein said computer is further programmed with instructions for controlling an analysis of said stroke indicator over time to determine a change in said stroke indicator.

26. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

a mask;

a blower to supply breathable gas at a pressure above atmospheric to said mask;

a pressure sensor to generate a pressure signal indicative of the pressure delivered to the patient; and

a computer to process said pressure signal and control said blower wherein said computer is programmed with instructions for:

controlling said blower to deliver breathable gas at a pressure above atmospheric to a patient; and

calculating a stroke indicator, said stroke indicator representing information about the patient's condition,

wherein said instructions for calculating said stroke indicator control a determination of a first percentile pressure from pressure delivered to a patient in a current session and a comparison of said first percentile pressure with a second percentile pressure determined from pressure delivered to said patient in a prior session.

27. (ORIGINAL) The apparatus of claim 26 wherein said first and second percentile pressures are 95th percentile pressures.

28. (PREVIOUSLY AMENDED) The apparatus of claim 26 with further instructions for recording said stroke indicator in a database of stroke indicators for multiple patients.

29. (PREVIOUSLY AMENDED) The apparatus of claim 26 with further instructions for identifying subsequent treatment based upon said stroke indicator.

30. (ORIGINAL) The apparatus of claim 29 wherein said treatment is a form of CPAP therapy.

31. (ORIGINAL) The apparatus of claim 29 wherein said treatment is a change in drug

therapy.

32. (PREVIOUSLY AMENDED) The apparatus of claim 23 with further instructions for evaluating changes in said stroke indicator to assess the efficacy of an administered drug.

33. (ORIGINAL) The apparatus of claim 32 wherein said instructions for evaluating said stroke indicator store said stroke indicator in a database of patient information.

34-35. (CANCELLED)

36. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

- a mask;

- a blower to supply breathable gas at a pressure above atmospheric to said mask;

- a flow sensor to generate a flow signal indicative of the patient's airflow; and

- a processor to process said flow signal and control said blower wherein said processor is configured and adapted for:

- controlling said blower to deliver breathable gas at a pressure above atmospheric to a patient; and

- calculating a stroke indicator from said flow signal, said stroke indicator representing information about the patient's condition, wherein said stroke indicator is a function of a ratio of a number of occurrences of central apnea and a number of occurrences of obstructive apnea.

37-39. (CANCELLED)

40. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

- a means for supplying breathable gas at a pressure above atmospheric to a patient;

- a flow sensor means to generate a flow signal indicative of the patient's airflow; and

a computer means to process said flow signal and control said blower wherein said computer is programmed with instructions for:

controlling said blower to deliver breathable gas at a pressure above atmospheric to a patient; and

calculating a stroke indicator from said flow signal, said stroke indicator representing information about the patient's condition,

wherein said instructions for calculating said stroke indicator control an analysis of said flow signal to determine an occurrence of central apnea and said instructions calculate said stroke indicator as a function of said occurrence of central apnea, and

wherein said instructions for calculating said stroke indicator control an analysis of said airflow to determine an occurrence of obstructive apnea and said instructions calculate said stroke indicator as a function of said occurrence of obstructive apnea, and

wherein said instructions for calculating said stroke indicator control a calculation of said stroke indicator as a function of a ratio of said occurrence of central apnea and said occurrence of said obstructive apnea.

41. (PREVIOUSLY AMENDED) The apparatus of claim 40 wherein said computer means is further programmed with instructions for recording said stroke indicator over time.

42. (PREVIOUSLY AMENDED) The apparatus of claim 41 wherein said computer means is further programmed with instructions for controlling an analysis of said stroke indicator over time to determine a change in said stroke indicator.

43. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

a means for supplying breathable gas at a pressure above atmospheric to a patient;

a pressure sensor means to generate a pressure signal indicative of the pressure delivered to the patient; and

a processing means to process said pressure signal and control said blower wherein said processor is programmed with instructions for:

controlling said blower to deliver breathable gas at a pressure above atmospheric to a

patient; and

calculating a stroke indicator, said stroke indicator representing information about the patient's condition,

wherein said instructions for calculating said stroke indicator control a determination of a first percentile pressure from pressure delivered to a patient in a current session and a comparison of said first percentile pressure with a second percentile pressure determined from pressure delivered to said patient in a prior session.

44. (ORIGINAL) The apparatus of claim 43 wherein said first and second percentile pressures are 95th percentile pressures.

45. (PREVIOUSLY AMENDED) The apparatus of claim 43 with further instructions for recording said stroke indicator in a database of stroke indicators for multiple patients

46. (PREVIOUSLY AMENDED) The apparatus of claim 43 with further instructions for identifying subsequent treatment based upon said stroke indicator.

47. (ORIGINAL) The apparatus of claim 46 wherein said treatment is a form of CPAP therapy.

48. (ORIGINAL) The apparatus of claim 46 wherein said treatment is a change in drug therapy.

49. (PREVIOUSLY AMENDED) The apparatus of claim 43 with further instructions for evaluating changes in said stroke indicator to assess the efficacy of an administered drug.

50. (ORIGINAL) The apparatus of claim 49 wherein said instructions for evaluating said stroke indicator store said stroke indicator in a database of patient information.

51-52. (CANCELLED)

53. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after

stroke comprising:

a means for supplying breathable gas at a pressure above atmospheric to a patient;

a flow sensor means to generate a flow signal indicative of the patient's airflow; and

a means for processing said flow signal and controlling said blower wherein said

means for processing is configured and adapted for:

controlling said blower to deliver breathable gas at a pressure above atmospheric to a patient; and

calculating a stroke indicator from said flow signal, said stroke indicator representing information about the patient's condition,

wherein said stroke indicator is a function of a ratio of a number of occurrences of central apnea and a number of occurrences of obstructive apnea.

54-57. (CANCELLED).

58. (PREVIOUSLY AMENDED) The medium of claim 72 further comprising stored instructions for controlling execution of the step of recording said stroke indicator over time.

59. (PREVIOUSLY AMENDED) The medium of claim 58 further comprising stored instructions for controlling execution of the step of analyzing said stroke indicator over time to determine a change in said stroke indicator.

60-63. (CANCELLED)

64. (PREVIOUSLY AMENDED) The medium of claim 72 with further instructions for recording said stroke indicator in a database of stroke indicators for multiple patients.

65-71. (CANCELLED)

72. (PREVIOUSLY AMENDED) A medium with stored instructions for use by an electronic processor to control the evaluation of the condition of a patient after stroke, said instructions for

controlling the execution of the step of:

calculating a stroke indicator from a measure of airflow of a patient, said airflow measured during the delivery of a pressure of breathable gas above atmospheric, said stroke indicator representing information about the patient's condition,

wherein said stroke indicator is a function of a ratio of a number of occurrences of central apnea and a number of occurrences of obstructive apnea.

73-79. (CANCELLED)

80. (PRESENTLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

a mask;

a blower to supply breathable gas at a pressure above atmospheric to said mask;

a flow sensor to generate a flow signal indicative of the patient's airflow; and

a computer to process said flow signal and control said blower wherein said computer is programmed with instructions for:

during a first period delivering breathable gas at a pressure above atmospheric to the patient;

determining a first index as a function of the total number of hypopneas and apneas experienced by the patient during said first period;

comparing said first index to a threshold value and if said first index exceeds said threshold value then selecting between different types of CPAP treatment;

wherein said computer is programmed with instructions for determining a second index as a ratio of the number of central apneas and the number of obstructive apneas experienced by said patient during said first period, wherein said step of selecting between forms of CPAP treatment is a function of said second index.

81-82. (CANCELLED)

83. (PRESENTLY AMENDED) The apparatus of claim 82 80 wherein said threshold value is about 20.

84. (ORIGINAL) The apparatus of claim 83 wherein said forms of CPAP comprise CPAP and bi-level CPAP.

85. (ORIGINAL) The apparatus of claim 84 wherein said CPAP is selected when said second index indicates a low occurrence of central apnea.

86. (CANCELLED)

87-88. (CANCELLED)

89. (PREVIOUSLY AMENDED) An apparatus for evaluating the condition of a patient after stroke comprising:

 a means for supplying breathable gas at a pressure above atmospheric to a patient;

 a flow sensor means to generate a flow signal indicative of the patient's airflow; and

 a computer means to process said flow signal and control said blower wherein said computer is programmed with instructions for:

 during a first period delivering breathable gas at a pressure above atmospheric to the patient;

 determining a first index as a function of the total number of hypopneas and apneas experienced by the patient during said first period;

 comparing said first index to a threshold value and if said first index exceeds said threshold value then selecting between forms of CPAP treatment,

 wherein said computer means is programmed with instructions for determining a second index as a ratio of the number of central apneas and the number of obstructive apneas experienced by said patient during said first period, wherein said step of selecting between forms of CPAP treatment is a function of said second index.

90. (ORIGINAL) The apparatus of claim 89 wherein said threshold value is about 20.

91. (PREVIOUSLY AMENDED) The apparatus of claim 90 wherein said forms of CPAP treatment comprise CPAP and bi-level CPAP.

92. (ORIGINAL) The apparatus of claim 91 wherein said CPAP is selected when said second index indicates a low occurrence of central apnea.

93-104. (CANCELLED)